

**Publications of
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REFEREED JOURNAL PUBLICATIONS:

- Koh, M., D. Perovich, and J.C. Comiso, Permittivity of Antarctic sea ice, *Geophys. Lett. Res.*, (submitted, 2005).
- Comiso, J. C. and G. Cota, Spatial and interannual variations in pigment concentrations in the Arctic and peripheral seas and their correlations with surface temperature, clouds, and wind, *J. Geophys. Res.* (in review, 2005).
- Gordon, A.L., M. Visbeck, and J.C. Comiso, A link between the Great Weddell Polynya and the Southern Annular Mode, *J. Climate* (in review, 2005).
- Comiso, J.C., Impacts of the variability of 2nd year ice types on the decline of the perennial ice cover, *Ann. of Glaciology*, 44 (accepted, 2005).
- Massom, R.A., T. Worby, V. Lytle, T. Markus, I. Allison, T. Scambos, H. Enomoto, K. Tateyama, T. Haran, J. Comiso, A. Pfaffling, T. Tamura, A. Muto, B. Giles, N. Yong, and G. Hyland, ARISE (Antarctic Remote Ice Sensing Experiment) in the East 2003: Validation of satellite-derived sea-ice data products, *Ann. of Glaciology*, 44 (accepted, 2005).
- Yang, J., and J.C. Comiso, Unexpected seasonal variability in salinity of the Beaufort Sea upper layer in 1996-1997, *J. Geophys. Res.* (in press, 2005).
- Comiso, J.C., Arctic warming signals from satellite observations, *Weather*, 61(3), 70-76, 2006.
- Comiso, J.C., Impact Studies of a 2° C global warming on the Arctic sea ice cover, in *2° is too much! Evidence and implications of Dangerous Climate Change in the Arctic*, ed. Lynn Rosentrater, WWF International Arctic Programme, Oslo, Norway, pp 44-56, 2005.
- Wang, Jian, G. F. Cota, and J. C. Comiso, Phytoplankton in the Beaufort and Chukchi Seas; Distributions, dynamics, and environmental forcing, *Deep Sea Res. II*, 52, 3355-33688, (2005).
- Comiso, J.C., Sea ice algorithm for AMSR-E, *Rivista Italiana di Telerilevamento (Italian Journal of Remote Sensing)*, 30/31, 119-130, 2004.
- Comiso, J. C. and C. L. Parkinson, Satellite observed changes in the Arctic, *Phys. Today* 57(8), 38-44, 2004.
- Worby, A. P., and J. C. Comiso, Studies of Antarctic sea ice edge and ice extent from satellite and ship observations, *Remote Sensing of the Environment*, 92(1), 98-111, 2004.
- Massom, R. A., M. J. Pook, J. C. Comiso, N. Adams, J. Turner, T. Lachlan-Cope, T. Gibson, Precipitation over the interior East Antarctica ice sheet related to mid-latitude blocking high activity, *J. Climate*, 17, 1914-1928, 2004.
- Cota, G., G. Wang, and J. C. Comiso, Transformation of global satellite chlorophyll retrievals with a regionally tuned algorithm, *Rem. Sensing of the Environment*, 90, 373-377, 2004.
- Schneider, D. P., E. J. Steig, and J. C. Comiso, Recent climate variability in Antarctica from satellite-derived temperature data , *J. Climate*, 17, 1569-1583, 2004.
- Yang, J., J.C. Comiso, D. Walsh, R. A. Krishfield, and S. Honjo, Storm-driven mixing in the upper Arctic Ocean and its relation to the Arctic Oscillation, *J. Geophys. Res.*, 109, C04008, doi:10.1029/2001JC001248, 2004.
- Comiso, J.C., J. Yang, S. Honjo, and R.A. Krishfield, The detection of change in the Arctic

- using satellite and buoy Data, *J. Geophys. Res.* 108(C12), 3384, doi:10.1029/2002jc001247, 2003.
- Comiso, J. C., Warming Trends in the Arctic, *J. Climate*, 16(21), 3498-3510, 2003.
- Ackley, S.F., P. Wadhams, J.C. Comiso, and A. Worby, Decadal decrease of Antarctic sea ice extent from whaling records revisited on the basis of historical and modern sea ice records, *Polar Research*, 22(1), 10-25, 2003.
- Comiso, J. C., D. J. Cavalieri, and T. Markus, Sea ice concentration, ice temperature, and snow depth, using AMSR-E data, *IEEE TGRS*, 41(2), 243-252, 2003.
- King, J. C., and J. C. Comiso, The spatial coherence of interannual temperature variations in the Antarctic Peninsula, *Geophys. Res. Lett.* 30(2), 1040, doi:10.1029/2002GL015580, 2003.
- Comiso, J. C., A rapidly declining Arctic perennial ice cover, *Geophys Res. Letts.*, 29(20), 1956, doi:10.1029/2002GL015650, 2002.
- Kwok, R., and J. C. Comiso, Spatial patterns of variability in Antarctic surface temperature: Connections to the Southern Hemisphere Annular Mode and the Southern Oscillation, *Geophys. Res. Lett.*, 29(14), 10.1029/2002GL015415, 2002.
- Comiso, J.C., Correlation and trend studies of the sea ice cover and surface temperatures in the Arctic, *Annals of Glaciology*, 34, 420-428, 2002.
- Shuman, C., and J.C. Comiso, In situ and satellite surface temperature records in Antarctica, *Annals of Glaciology*, 34, 113-120, 2002.
- Zwally, H.J., J.C. Comiso, C. Parkinson, D. Cavalieri, P. Gloersen, Variability of the Antarctic sea ice cover, *J. Geophys. Res.*, 107(C5), 1029-1047, 2002.
- Kwok, R., and J.C. Comiso, Southern ocean climate and sea ice anomalies associated with the Southern Oscillation, *J. Climate*, 15(5), 487-501, 2002.
- Ackley, S.F., C. Geiger, J.C. King, E.C. Hunke, and J. C. Comiso, The Ronne Polynya of 1997-1998: Observations of air-ice-ocean interaction, *Ann. Glaciol.* 33, 425-429, 2001.
- Comiso, J.C., Satellite observed variability and trend in sea ice extent, surface temperature, albedo, and clouds in the Arctic, *Ann. Glaciol.* 33, 457-473, 2001.
- Comiso, J.C., and K. Steffen, Studies of Antarctic sea ice concentrations from satellite data and their applications, *J. Geophys. Res.*, 106(C12), 31361-31385, 2001.
- Wilson, P.R., D.G. Ainley, N. Nur, S.S. Jacobs, K. Barton, G. Ballard, and J.C. Comiso, Adelie penguin population growth in the South Pacific Sector of Antarctica: Relation to sea-ice extent and the Southern Oscillation, *Mar. Ecol. Prog. Ser.* 213, 301-309, 2001.
- Comiso, J.C., P. Wadhams, L.T. Pedersen, and R. Gersten, The seasonal and interannual variability of the Odden and a study of environmental effects, *J. Geophys. Res.*, 106(C5), 9093-9116, 2001.
- Yang, J., J. Comiso, R. Krishfield, and S. Honjo, The role of synoptic storms in the development of the 1997 warming and freshening event in the Beaufort Sea, *Geophys. Res. Lett.*, 28(5), 799-802, 2001.
- Comiso, J.C., Variability and trends in Antarctic surface temperatures from in situ and satellite infrared measurements, *J. Climate*, 13(10), 1674-1696, 2000.
- Kerman, B., P. Wadhams, and J.C. Comiso, Informational equivalence between Synthetic Aperture Radar imagery and the thickness of Arctic pack ice, *J. Geophys. Res.* 104(C12), 29721-29732, 1999.
- Gloersen, P., C.L. Parkinson, D.J. Cavalieri, J.C. Comiso and H.J. Zwally, Spatial distribution of trends and seasonality in hemispheric sea ice cover: 1978-1996, *J. Geophys. Res.*, 104(C9), 20827-20835, 1999.
- Parkinson, C.L., D.J. Cavalieri, P. Gloersen, H.J. Zwally, and J.C. Comiso, Arctic sea ice extents, areas, and trends, 1978-1996, *J. Geophys. Res.*, 104(C9), 20837-20856, 1999.

- Cavalieri, D.J., C.L. Parkinson, P. Gloersen, J.C. Comiso, and H.J. Zwally, Deriving long-term time series of sea ice cover from satellite passive microwave data sets, *J. Geophys. Res.*, 104(C7), 15803-15814, 1999.
- Toudal, L., K.Q. Hansen, H. Valeur, P. Wadhams, E. Aldworth, and J. C. Comiso, Mapping of ice in the Odden by satellite and airborne remote sensing, *Deep Sea Research*, 46(6-7), 1255-1274, 1999.
- Wadhams, P. and J.C. Comiso, Two modes of the Odden ice tongue, *Geophys. Res. Letters*, 26(16), 1999.
- Massom, R.A., J.C. Comiso, A.P. Worby, V. Lytle, and L. Stock, Satellite and in situ observations of regional classes of sea ice cover in the East Antarctic pack in winter, *Remote Sensing of the Env.*, 68(1), 61-76, 1999.
- Kwok, R., and J.C. Comiso, The perennial ice cover of the Beaufort Sea from active and passive microwave observations, *Annals of Glaciology*, 25, 376-381, 1997.
- Cavalieri, D.J., P. Gloersen, C. Parkinson, J. Comiso, and H.J. Zwally, Observed hemispheric asymmetry in global sea ice changes, *Science*, 278(7), 1104-1106, 1997.
- Jacobs, S.S., and J.C. Comiso, Climate variability in the Amundsen and Bellingshausen Seas, *J. Climate*, 10(4), 697-709, 1997.
- Comiso, J.C., D. Cavalieri, C. Parkinson, and P. Gloersen, Passive microwave algorithms for sea ice concentrations, *Remote Sensing of the Env.*, 60(3), 357-384, 1997.
- Comiso, J.C., and R. Kwok, The summer Arctic sea ice cover from satellite observations, *J. Geophys. Res.*, 101(C2), 28397-28416, 1996.
- Kwok, R., J.C. Comiso, and G. Cunningham, Seasonal characteristics of the perennial ice cover of the Beaufort Sea, *J. Geophys. Res.*, 101(C2), 28417-28439, 1996.
- Comiso, J.C., Sea ice geophysical parameters in the Arctic and the Sea of Okhotsk using multichannel passive microwave data, *Journal of Japanese Remote Sensing*, 16(2), 32-46, 1996.
- Comiso, J.C., and A.L. Gordon, The Cosmonaut Polynya in the Southern Ocean: Structure and variability, *J. Geophys. Res.*, 101(C8), 18297-19313, 1996.
- Wadhams, P., J.C. Comiso, E. Prussen, S. Wells, D.R. Crane, M. Brandon, E. Aldworth, T. Viehoff, and R. Allegrino, The development of the Odden Ice Tongue in the Greenland Sea during winter 1993 from remote sensing and field measurements, *J. Geophys. Res.*, 101(C8), 18213-18235, 1996.
- Grenfell, T.C., J.C. Comiso, M.A. Lange, H. Eicken, and M.R. Wenshahan, Passive microwave observations of the Weddell Sea during austral winter and early spring, *J. Geophys. Res.*, 99(C5), 9995-10,010, 1994.
- Comiso, J.C., Surface Temperatures in the Polar Regions using Nimbus-7 THIR, *J. Geophys. Res.*, 99(C3), 5181-5200, 1994.
- Massom, R. and J.C. Comiso, Sea ice classification and surface temperature determination using Advanced Very High Resolution Radiometer satellite data, *J. Geophys. Res.*, 99(C3), 5201-5218, 1994.
- Sullivan, C.W., K.R. Arrigo, C.R. McClain, J.C. Comiso, and J. Firestone, Distributions of phytoplankton blooms in the Southern Ocean, *Science*, 262, 1832-1837, 1993.
- Menasi, J., C. Swift, K. St. Germain, J. Comiso, and A. Lohanick, Passive microwave measurement of sea ice thickness, *J. Geophys. Res.*, 98(C12), 22569-22578, 1993.
- De Veaux, R., A.L. Gordon, J.C. Comiso, and N.E. Chase, Modeling of topographical effects on Antarctic sea ice using multivariate adaptive regression splines, *J. Geophys. Res.*, 98(C11), 20207-20319, 1993.

- Gloersen, P., W.J. Campbell, D.J. Cavalieri, J.C. Comiso, C.L. Parkinson, and H.J. Zwally, Satellite passive microwave observations and analysis of Arctic and Antarctic sea ice, *Ann. of Glaciol.*, 17, 149-154, 1993.
- Steffen, K., R. Bindschadler, C. Casassa, J. Comiso, D. Eppler, F. Fetterer, J. Hawkins, J. Key, D. Rothrock, R. Thomas, R. Weaver, and R. Welch, Snow and ice applications of AVHRR in polar regions, *Ann. Glaciol.*, 17, 1-16, 1993.
- Comiso, J.C., and R. Kwok, Summer Arctic ice concentration and characteristics from ERS1-SAR and SSM/I data, Proceedings of the First ERS-1 Symposium: Space at the Service of our Environment, Cannes, France, 4-6 November 1992, *ESA SP-359*, 367-372, 1993.
- Jacobs, S.S. and J.C. Comiso, A recent sea-ice retreat west of the Antarctic Peninsula, *Geophys. Res. Letter*, 20(12), 1171-1174, 1993.
- Comiso, J.C., C. McClain, C. Sullivan, J. Ryan, and C. L. Leonard, CZCS pigment concentrations in the Southern Ocean and their relationships to some geophysical parameters, *J. Geophys. Res.*, 98(C2), 2419-2451, 1993.
- Wadhams, P., W. Tucker, W. Krabill, R. Swift, J. Comiso, and N. Davis, The relationship between sea ice freeboard and draft in the Arctic Basin, and implications for ice thickness monitoring, *J. Geophys. Res.*, 97(C12), 20325-20334, 1992.
- Van Woert, M., R.H. Whritner, D.E. Waliser, D.H. Bromwich, and J.C. Comiso, The Antarctic Research Center: A source of multi-sensor satellite data, for polar science, Transaction of the American Geophysical Union, *EOS*, 73(6), 65 and 76, 1992.
- Comiso, J.C., Satellite remote sensing of the polar oceans, *J. Mar. Sys.*, 2, 395-434, 1991.
- Mitchell, B.G., E. Brody, E.N. Yeh, C. McClain, J. C. Comiso, and N.C. Maynard, Meridional zonation of the Barents Sea ecosystem inferred from satellite remote sensing and in-situ Bio-optical observations, Pro Mare Symposium, *Polar Research*, 10(1), 147-162, 1991.
- Comiso, J.C., P. Wadhams, W. Krabill, R. Swift, J. Crawford, and W.Tucker, Top/Bottom multisensor remote sensing of Arctic sea ice, *J. Geophy. Res.*, 96(C2), 2693-2711, 1991.
- Wadhams, P., J.C. Comiso, J. Crawford, G. Jackson, W. Krabill, R. Kutz, C.B.Sear, R. Swift, W.B. Tucker and N. R. Davis, Concurrent remote sensing of Arctic sea ice from submarine and aircraft, *Int. J. Remote Sensing*, 12(9), 1829-1840, 1991.
- Comiso, J.C., Arctic multiyear ice classification and summer ice cover using passive microwave satellite data, *J. Geophys. Res.*, 95(C8), 13411-13422, 13593-13597, 1990.
- Comiso, J.C., N. G. Maynard, W.O. Smith, Jr., and C.W. Sullivan, Satellite ocean color studies of Antarctic ice edges in summer/autumn, *J. Geophys. Res.*, 95(C6), 9481-9496, 1990.
- Jacobs, S. and J. C. Comiso, Satellite passive microwave sea ice observations and oceanic processes in the Ross Sea, Antarctica, *J. Geophys. Res.*, 94, 18195-18211, 1989.
- Comiso, J. C., T. C. Grenfell, D. L. Bell, M. A. Lange, and S. F. Ackley, Passive microwave in situ observations of winter Weddell sea ice, *J. Geophy. Res.*, 94, 10891-10905, 1989.
- Sullivan, C.W., C. McClain, J.C. Comiso, and W. O Smith Jr., Phytoplankton standing crops within an Antarctic ice edge, *J. Geophys. Res.*, 93, 12487-12498, 1988.
- Gordon, A. L., and J. C. Comiso, Polynyas in the Southern Ocean, *Scientific American*, 256, 90-97, 1988.
- Smith, W. O., N. K. Keene, and J. C. Comiso, Potential interannual variability in primary productivity of the Antarctic Marginal Ice Zone, in *Antarctic Ocean and Resources Variability*, ed. by D. Sahrhage Springer, New York, 131-139, 1988.
- Comiso, J. C., and A. L. Gordon, Recurring polynyas over the Cosmonaut Sea and the Maud Rise, *J. Geophys. Res.*, 92(C3), 2819-2834, 1987.

- Parkinson, C. L., J. C. Comiso, H. J. Zwally, D. J. Cavalieri, P. Gloersen, and W. J. Campbell, Analysis of northern hemisphere sea ice from satellite passive microwave data, *Annals of Glaciology*, 9, 1-8, 1987.
- Grenfell, T., and J. C. Comiso, Multifrequency passive microwave observations of first year sea ice grown in a tank, *IEEE Trans. on Geos. and Rem. Sensing*, GE-24, 826-831, 1986.
- Comiso, J. C. and C. W. Sullivan, Satellite microwave and in-situ observations of the Weddell Sea ice cover and its marginal ice zone, *J. Geophys. Res.*, 91(C8), 9663-9681, 1986.
- Comiso, J. C., Characteristics of winter sea ice from satellite multispectral microwave observations, *J. Geophys. Rev.*, 91(C1), 975-994, 1986.
- Comiso, J. C., Remote sensing of sea ice using multispectral microwave satellite data, in *Advances in Remote Sensing Retrieval Methods*, ed. by A. Deepak, H. E. Fleming, and M. T. Chahine, A Deepak Publishing, Hampton, Virginia, pp. 349-368, 1985.
- Zwally, H. J., J. C. Comiso, and A. L. Gordon, Antarctic offshore leads and polynyas and oceanographic effects, in *Oceanology of the Antarctic Continental Shelf*, ed. by S. Jacobs, Antarctic Research Volume 43, pp. 203-226, 1985.
- Comiso, J. C., and H. J. Zwally, Concentration gradients and growth/decay characteristics of the seasonal sea ice cover, *J. Geophys. Res.*, 89(C5), 8081-8103, 1984.
- Comiso, J. C., S. F. Ackley, and A. L. Gordon, Antarctic Sea Ice Microwave Signature and their Correlation with In-Situ Ice Observations, *J. Geophys. Res.*, 89(C1), 662-672, 1984.
- Zwally, H. J., C. L. Parkinson, and J. C. Comiso, Variability of Antarctic sea ice and changes in carbon dioxide, *Science*, 220, 1005-1012, 1983.
- Comiso, J. C., Sea ice microwave emissivities from satellite passive microwave and infrared observations, *J. Geophys. Res.*, 88(C12), 7686-7704, 1983.
- Comiso, J. C., and H. J. Zwally, Antarctic sea ice concentrations inferred from Nimbus-5 ESMR and LANDSAT imagery, *J. Geophys. Res.*, 87(C8), 5836-5844, 1982.
- Comiso, J. C., H. J. Zwally, and J. L. Saba, Radiative transfer modeling of microwave emission and dependence on firn properties, *Ann. Glaciol.*, 3, 54-58, 1982.
- Schlepuetz, F. W., J. C. Comiso, T. C. Meyer, and K. O. H. Ziock, The Emission of Low Energy Charged Particles following Negative Pion Capture from Rest, *Phys. Rev.*, C19, 135-141, 1979.
- Comiso, J. C., A. Wadlinger, H. J. Ziock, K. O. H. Ziock, and K. P. Ziock, A Study of the Reactions $(\pi^+, 2p)$, (π^+, p^3He) in 7Li and ${}^{12}C$, *Phys. Letter*, 78B, 31-35, 1978.
- Doering, R. R., T. C. Schweizer, S. T. Thornton, L. C. Denis, K. R. Cordel, K. O. H. Ziock, and J. C. Comiso, Correlated Energy Spectra of Light Fragments from 720 MeV α -Induced Reactions, *Phys. Rev. Lett.*, 40, 1433-1435, 1978.
- Comiso, J. C., H. J. Ziock, K. O. H. Ziock, and K. P. Ziock, A Study of the Reaction ${}^{12}C(\pi^+, \pi^+ p) {}^{11}B$, *Z. Physik*, A285, 101-104, 1978.
- Brody, H., S. Frankel, W. Frati, D. Yang, C. F. Perdrisat, J. C. Comiso, and K. O. H. Ziock, 180° Production of Protons in High Energy p, d, and alpha reactions in Nuclei, *Phys. Lett.*, 71B, 79-89, 1977.
- Comiso, J. C., F. Schlepuetz, and K. O. H. Ziock, An Unfolding Procedure for Charged Particle Spectra and its Applications to the Measurement of Stopping Powers, *Nuclear Inst. and Methods*, 133, 1, 1976.
- Weiss, A. J., J. C. Comiso, R. P. Haddock, B. M. K. Nefkens, L. J. Verhey, M. B. Zeller, K. M. Crowe, A. Fainberg, and P. Truoel, Measurement of the Differential Cross-Section for the Radiative Pion-Proton Capture in the Second Resonance Region, *Nucl. Phys.*, B101, 1-12, 1975.
- Comiso, J. C., T. Meyer, F. Schlepuetz, and K. O. H. Ziock, Measurement of the Alpha-Particle

- Spectrum Resulting from π^- capture in ^{12}C , *Phys. Rev. Lett.*, 35, 13-21, 1975.
- Comiso, J. C., D. J. Blasberg, R. P. Haddock, B. M. K. Nefkens, P. Truoel, and L. J. Verhey, Differential Cross-section measurements of $\pi^- p$ to $\pi^0 n$ around the $P_{33}(1232)$ Resonance, *Phys. Rev., D12*, 738-743, 1975.
- Comiso, J. C., D. J. Blasberg, R. P. Haddock, B. M. K. Nefkens, P. Truoel, and L. J. Verhey, Inverse Pion Photoproduction in the vicinity of the $P_{33}(1232)$ Resonance and a Test of Time Reversal Invariance, *Phys. Rev., D12*, 719-737, 1975.

BOOK CHAPTERS:

- Comiso, J.C., Large Scale Characteristics and Variability of the Global Sea ice Cover, Chapter 4, in *Sea Ice - an introduction to its physics, biology, chemistry, and geology*, ed. by David Thomas, Blackwell, Scientific LTD., pp. 112-142, 2003.
- Comiso, J.C., and A.L. Gordon, Interannual variabilities of summer ice minimum, coastal polynyas, and bottom water formation in the Weddell Sea, in Antarctic sea ice physical properties and processes, *AGU Antarctic Research Series Volume*, edited by M. Jeffries, pp 293-315, 1998.
- Comiso, J.C., Remote Sensing of the Arctic, in Arctic Oceanography: Marginal Ice Zones and Continental Shelves, ed. by W. Smith and J. Grebmeier, AGU Monograph on Coastal and Estuarine Studies, Vol. 48, pp.1-50, 1995.
- Comiso, J.C., Sea ice geophysical parameters from SMMR and SSM/I data, Chapter 20, in Oceanographic Application of Remote Sensing, ed. by M. Ikeda and F. Dobson, CRC Press Inc., Boca Raton, FL, pp. 327-344, 1995.
- Comiso, J.C., T.C. Grenfell, M. Lange, A. Lohanick, R. Moore, and P. Wadhams, "Microwave remote sensing of the Southern Ocean ice cover," Chapter 12, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 243-259, 1992.
- Wadhams, P. and J.C. Comiso, "The ice thickness distribution inferred using remote sensing techniques," Chapter 21, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 375-383, 1992.
- Eppler, D., M.R. Anderson, D.J. Cavalieri, J.C. Comiso, L.D. Farmer, C. Garrity, P. Gloersen, T. Grenfell, M. Hallikainen, A.W. Lohanick, C. Maetzler, R.A. Melloh, I. Rubinstein, C.T. Swift, C. Garrity, "Passive microwave signatures of sea ice," Chapter 4, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 47-71, 1992.
- Steffen, K., D. J. Cavalieri, J. C. Comiso, K. St. Germain, P. Gloersen, J. Key, and I. Rubinstein, "The estimation of geophysical parameters using Passive Microwave Algorithms," Chapter 10, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 201-231, 1992.
- Martin, S., K. Steffen, J.C. Comiso, D.J. Cavalieri, M. Drinkwater, B.M. Holt, "Microwave Remote Sensing of Polynyas," Chapter 15, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 303-311, 1992.
- Grenfell, T.C. D.J. Cavalieri, J.C. Comiso, M.R. Drinkwater, R.G. Onstott, I. Rubinstein, K. Steffen, I. Rubinstein, D.P. Winebrenner, "Microwave signatures of new and young ice," Chapter 14, *Microwave Remote Sensing of Sea Ice*, (ed. by Frank Carsey), American Geophysical Union, Washington, D.C., 291-301, 1992.

BOOKS:

- Gloersen P., W. Campbell, D. Cavalieri, J. Comiso, C. Parkinson, H.J. Zwally, Arctic and Antarctic Sea Ice, 1978-1987: Satellite Passive Microwave Observations and Analysis, *NASA Spec. Publ. 511*, 1992.
- Parkinson, C. L., J. C. Comiso, H. J. Zwally, D. J. Cavalieri, P. Gloersen, and W. J. Campbell, Arctic Sea Ice 1973-1976 from Satellite Passive Microwave Observations, *NASA Spec. Publ. 489*, 1987.
- Zwally, H. J., J. C. Comiso, C. L. Parkinson, W. J. Campbell, F. D. Carsey, and P. Gloersen, Antarctic Sea Ice 1973-1976 from Satellite Passive Microwave Observations, *NASA Spec. Publ. 459*, 1983.
- Comiso, J.C., Polar Oceans from Space, Springer Publishing (in preparation).

INTERNAL REPORTS AND OTHER PUBLICATIONS:

- Comiso, J. C., and M. Drinkwater, Antarctic Polynyas: ventilation, bottom water, and high productivity for the world's oceans, *Our Changing Planet*, ed. by M. King, C. Parkinson, K. Partington, and R. Williams (in Press, 2005).
- Drinkwater, M. and J.C. Comiso, Sea Ice: the shifting crust of the Southern Ocean, *Our Changing Planet*, ed by M. King, C. Parkinson, K. Partington, and R. Williams (in Press, 2005).
- Nishio, F. and J.C. Comiso, The Polar Ice Cover from Aqua/AMSR-E, *Proceedings of the IGARSS-2005 Symposium*, 24-30 July, 2005.
- Comiso, J. C., A changing Arctic sea ice cover, *Proceedings of the 19th International Symposium on Okhotsk Sea and Sea Ice*, Mombetsu, Japan, 22-26 February 2004, 2004.
- Comiso, J.C., The polar sea ice cover - how it is changing; *Proceedings of PORSEC 2004*, University of Concepcion, Chile, 27 Nov. to 5 December, 2004.
- Comiso, J.C., Climate change signals from the Arctic, Philippine Star, Manila, Philippines, 2005.
- King, J. C., N.P.M. van Lipzig, W.M. Connelley, and J. C. Comiso, Are temperature variations at Antarctic ice core sites representative of broad-scale climate variations?, *Proceedings of Polar Ice Core Meeting*, American Meteorological Society, 2003.
- Cavalieri, D.J., J. Maslanik, T. Markus, J.C. Stroeve, M. Sturm, J. Heinrichs, E. Kim, A. Gasiewsky, J.C. Comiso, EOS aqua AMSR-E Arctic sea ice validation program, *Proceedings of SPIE*, Vol. 4894, 413-424, 2003.
- Comiso, J. C., A rapidly retreating Arctic perennial sea ice cover, *Proceedings of the Pan Ocean Remote Sensing Conference*, Bali, Indonesia, September 2002.
- Comiso, J.C., and L.V. Stock, Studies of Antarctic Cloud Cover Variability from 1981 to 1999, *Proceedings of IGARSS-2004*, Sydney Australia, Vol. 4, pp. 1782-1785, July 2001.
- Worby, A.P., and J. Comiso, A study of the Antarctic Sea Ice Edge using SSM/I-Derived and in situ Observations, *Proceedings of IGARSS-2000*, Sydney, Australia, pp. 380-383, July 2001.
- Comiso, J. C., Sea ice and ice temperature variability as observed by microwave and infrared satellite data, *Proceedings of AMS Polar Meteorology Conference*, San Diego, CA..2001
- Comiso, J.C., The detection of Climate and Environmental Changes using in situ and satellite observations, NAST Proceedings, Manila, Philippines (in press, 2001)
- Comiso, J.C., and L.V. Stock, Interannual Variability of Arctic Summer Ice Melt

- and Meltponding using Satellite Observations, *IEEE IGARSS'00 Digest*, Volume x, 2000.
- The Multifrequency Imaging Microwave Radiometer: Science Advisory Group Report, *ESA SP-1245, 49pp.* 2001.
- Comiso, J.C., and H.J. Zwally, Temperature Corrected Bootstrap Algorithm, *IEEE IGARSS'97 Digest*, Volume 3, 857-861, 1997.
- Comiso, J.C., and L. Stocks, Surface Temperatures from 1979 through 1995 in the Antarctic Region Derived from Satellite Infrared Data, *IEEE IGARSS'97*, Volume 3, 1300-1304, 1997.
- Toudal, L., K.Q. Hansen, H. Valeur, P. Wadhams, E. Aldworth, and J.C. Comiso, Mapping of ice in the Odden by satellite and airborne remote sensing, in ESOP: European Subpolar Ocean Programme, *Sea ice – ocean interactions, Scientific Report*, ed. By Wadhams, P., J.P. Wilkinson, and S.C.S. Wellls, European Commission, Brussels, vol. 2, 306-330, 1996.
- Tjuata, S., A.K. Fung, and J.C. Comiso, Scattering and Emission from Dry Snow in the range 35-140 GHz, *IEEE IGARSS'96 Digest*, Vol.3,, 1996.
- Comiso, J.C., Synergistic Studies of the Sea of Okhotsk using Multisensor Satellite Data, Proceedings of the Workshop on Sea of Okhotsk, Tokyo, Japan, February 28-March 1, 1996.
- Comiso, J.C., SSM/I Concentrations using the Bootstrap Algorithm, *NASA RP, 1380*, 40pp, 1995.
- Comiso, J.C., Unsupervised Classification of Arctic Sea Ice using Neural Network, *IEEE IGARSS'95 Digest*, Vol. 1, 414-418, 1995.
- Tjuata, S., A.K. Fung, and J.C. Comiso, Effects of Snow Cover on Sea Ice Emission, *IEEE IGARSS'95 Digest*, Vol. 1, 697-699, 1995.
- Comiso, J.C., and S. Ackley, Antarctic sea ice passive microwave signatures during summer and autumn, *IEEE IGARSS'94 Digest*, Vol. 1, 143-146, 1994.
- Rau, Yi-Chung, J.C. Comiso, F.Y.M Lure, Application of Neural Networks for Identification of sea ice coverage and movements from satellite imagery, *IEEE IGARSS'94 Digest*, Vol. 3, 1407-1409, 1994.
- Comiso, J.C., Ice Regimes in the Antarctic and the Arctic, *IEEE IGARSS'93 Digest*, Vol. 2, 843-846, Tokyo, Japan, 1993.
- Comiso, J.C., Sea Ice Cover and Surface Temperature Trends in the 1980s *GLOBEC Workshop Proceedings*, 1991.
- Comiso, J. C., Correlation Studies of Passive and Active Microwave Data in the Marginal Ice Zone, *IEEE IGARRS'91 Digest*, Extended abstract, Helsinki, Finland, 1991.
- Massom, R. and J.C. Comiso, The detection of new sea ice using Advanced Very High Resolution Radiometer and Special Sensor Micorwave Imager Satellite Data, *IEEE IGARRS'91 Digest*, Helsinki, Finland, 1991.
- Jentz, R.R., C.C. Wackerman, R.A. Schuchman, R.G. Onstott, P. Gloersen, D. Cavalieri, J. Comiso, R. Ramseier, I. Rubinstein, and J. Hollinger, NASA, NAVY, and AES/York Sea Ice Concentration Comparison of SSMI Algorithms with SAR Derived Values, *IEEE IGARRS'91 Digest*, Extended abstract, Helsinki, Finland, 1991.
- Vasecky, J.F., M.P. Smith, R. Samadani, J.D. Daida, and J.C. Comiso Automated Extraction of Pressure Ridges from SAR images of Sea Ice:

- Comparison with Surface Truth, *IEEE IGARRS'91 Digest*, Extended abstract, Helsinki, Finland, 1991.
- Comiso, J.C., R. Kutz, T. Dod, and J. Crawford, Airborne Passive Microwave Observations of Sea Ice, in *Sea Ice Properties and Processes: Proceedings of the W.F. Weeks Sea Ice Symposium*, ed. by S.F. Ackley and W. F. Weeks, *CRREL Monograph 90-1*, Hanover, New Hampshire, 233-235, 1990.
- Comiso, J.C., and H. J. Zwally, Polar Microwave Brightness Temperatures from Nimbus-7 SMMR, Time Series of Daily and Monthly Maps from 1978 to 1987, *NASA RP1223*, 1989.
- Grenfell and Comiso, UW Passive Microwave Observations and Surface Characterization during the Winter Weddell Sea Project 1986, University of Washington, Seattle, Washington, 1988
- Parkinson, C.L., J.C. Comiso, H.J. Zwally, D.J. Cavalieri, P. Gloersen, and W.J. Campbell, Satellite-Derived Ice Data Sets No. 2: Arctic Monthly Average Microwave Brightness Teamperatures and Ice Concentrations, 1973-1976, *NASA TM 87825,3* 1987.
- Bell, D., T.C. Grenfell, and J.C. Comiso, Microwave Angular Distributions from the Winter Weddell Experiment, University of Washington Press, 250 pp, 1987.
- Comiso, J. C., Satellite Remote Sensing for Oceanography in 1986, Proceedings of Winter Weddell Research Workshop, ed. A. Gordon, Lamont-Doherty Geological Observatory, Palisades, N. Y., 1984.
- Comiso, J. C., Microwave Remote Sensing of the Environment, in *Proceedings International Conference on Energy and Environment*, ed. by S. Koh, National Science Board, Manila, Philippines, pp. 383-398, 1982.
- Zwally, H. J., J. C. Comiso, and C. L. Parkinson, Satellite-Derived Ice Data Sets No. 1: Antarctic Monthly Average Microwave Brightness Temperatures and Sea Ice Concentrations, 1973-1976, *NASA TM 83812*, 1981.
- Gloersen, P., D. J. Cavalieri, J. C. Comiso, H. J. Zwally, W. J. Campbell, and P. Gudmansen, Time Sequential Multispectral Observations of the Greenland Ice Sheet, 1981 *IEEE International Geoscience and Remote Sensing Symposium Digest*, Vol. 1, ed. by K. R. Carver, 79, 1981.
- Zwally, H. J., J. C. Comiso, C. L. Parkinson, F. D. Carsey, W. J. Campbell and P. Gloersen, Analysis of Internal Changes in Antarctic Sea Ice Cover from Satellite Passive Microwave, ed. by G. Kukla, Snow Watch, 1981.
- Comiso, J. C., H. J. Zwally, Corrections for Anomalous Time Dependent Shifts in the Brightness Temperature from the Nimbus-5 ESMR, *NASA-TM 82055*, 1980.